Study Unit 2

- Conceptual database design - The purpose of the conceptual design phase is to build a conceptual model based upon the previously iden□□ed requirements, but closer to the □nal physical model. A commonly-used conceptual model is called an en□ty-rela□onship model.
- En□ty SET - A collec□on of similar en□□es. E.g., all employees.
- A□ributes - a property or descrip□on of an en□ty.
- Domain - A set of possible values for an a□ribute.
- Key - A column or columns on which an index is constructed to allow rapid and/or sorted access to a table's row.
- Rela□onship - Associa□on among two or more en□□es. E.g., A$shoo works in Pharmacy department.
- Role playing En□□es – AS JY DIT KRY SE MY
- One to Many rela□onship - A key constraint that indicates that one en□ty can be associated with many of another en□ty.
- Many to Many Rela□onship - A key constraint that indicates that many of one en□ty can be associated with many of another en□ty.
- Ternary rela□onship - A ternary rela□onship is when both par□cipants in the rela□onship are the same en□ty. For Example: Subjects may be prerequisites for other subjects.
- Par□cipa□on Constraints - A par□cipa□on constraint determines whether rela□onships must involve certain en□□es.
- Key Constraints

o Primary Key constraint - A column or group of columns in a given table that uniquely iden□□es each row of the table.

o Foreign Key constraint - One or more columns in a table intended to contain only values that match the related primary/unique key column(s) in the referenced table.

o Unique Key constraint - Prevents duplicate values in a column.

- Weak En□ty - An en□ty that cannot be iden□□ed uniquely without considering some primary key a□ributes of another iden□fying owner en□ty.
- "Is a" rela□onship -
- Overlap constraints - Within an ISA hierarchy, an overlap constraint determines if two

subclasses can contain the same en□ty.

- Covering Constraints - Within an ISA hierarchy, a covering constraint determines where the en□□es in the subclasses collec□vely include all en□□es in the superclass.
- Aggrega□on - A feature of the en□ty rela□onship model that allows a rela□onship set to par□cipate in another rela□onship set.
- Instance - The data stored in database at a moment of □me is called instance of database.